Scientific and Technical Information Center

SEARCH REQUEST FORM

	SEARCH REQU	BOX 1 Oldin
Antinia 1/2/1 Pho	no Number: 2- 0663	xaminer # : 59193 Date: 246/06 Serial Number: 10.8019 sults Format Preferred (circle): PAPER DISK ************************************
		sheet, claims, and abstract or fill out the following:
Title of Invention:		
Inventors (please provide full name	es):	
		•
Earliest Priority Date:		,
Search Topic: Please provide a detailed statement of th elected species or structures, keywords, s Define any terms that may have a specia	vnonyms, acronyms, and registry nun	cally as possible the subject matter to be searched. Include th abers, and combine with the concept or utility of the invention citations, authors, etc., if known.
For Sequence Searches Only Please i appropriate serial number.	nclude all pertinent information (part	ent, child, divisional, or issued patent numbers) along with the
si—ni	N O O O Si	#242
secret per se where the replaced to formula	this as extend of compained with the reaches $S_i - Q_i$, where	the structure also as (As read) the Both S, whoms ted with a compet of here Q = HallOIN
*****	*******	*********
STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher:		STNDialog
Searcher Phone #:	•	Questel/Orbit Lexis/Nexis
Searcher Location:	•	WestlawWWW/Internet
Date Searcher Picked Up:	Bibliographic .	In-house sequence systems
Date Completed: 2:1)	Litigation	Commercial Oligomer Score/Length SPDI Encode/Transl
Searcher Prep & Review Time:	Fulltext	Other (specify)

=> fil casreact
FILE CASREACT ENTERED AT 14:59:49 ON 17 FEB 2006
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT: 1840 - 12 Feb 2006 VOL 144 ISS 7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

Some CASREACT records are derived from the ZIC/VINITI database (1974-1991) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

VAR G1=X/O/N

NODE ATTRIBUTES:

NSPEC IS RC AT 11
NSPEC IS RC AT 18
CONNECT IS E1 RC AT 22
CONNECT IS E1 RC AT 27
DEFAULT MISSEL IS ATOM

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 36

STEREO ATTRIBUTES: NONE

L9 0 SEA FILE=CASREACT SSS FUL L7 (0 REACTIONS)

=> d his ful

. . .

(FILE 'HOME' ENTERED AT 14:53:42 ON 17 FEB 2006)

	FILE	'REGISTRY'	ENTERED	AT 14:	53:52 ON 17 FEB 2006
L1		89612 SEA	ABB=ON	PLU=ON	NC3/ESS AND NCSC3/ESS
L2		113 SEA	ABB=ON	PLU=ON	L1 AND SI>1
L3		111 SEA	ABB=ON	PLU=ON	L2 AND N>1 AND O>2

STR L4T.5 0 SEA SSS SAM L4 L6 7 SEA SSS FUL L4

D SCA

FILE 'CASREACT' ENTERED AT 14:57:32 ON 17 FEB 2006

L7 STR L4

L8 O SEA SSS SAM L7 (0 REACTIONS) O SEA SSS FUL L7 (L9 0 REACTIONS)

FILE 'CASREACT' ENTERED AT 14:59:49 ON 17 FEB 2006 D QUE

FILE 'REGISTRY' ENTERED AT 15:00:14 ON 17 FEB 2006

L10STR L4

L11184 SEA SSS FUL L10

1224926 SEA ABB=ON PLU=ON SI/ELS L12

FILE 'HCAPLUS' ENTERED AT 15:00:53 ON 17 FEB 2006

L13

3 SEA ABB=ON PLU=ON L6(L)PREP+ALL/RL 38 SEA ABB=ON PLU=ON L11(L)RACT+ALL/RL 3 SEA ABB=ON PLU=ON L13 AND L14 L14

L15

FILE 'REGISTRY' ENTERED AT 15:02:06 ON 17 FEB 2006

FILE 'HCAPLUS' ENTERED AT 15:02:09 ON 17 FEB 2006 L16 TRA L15 1- RN : 94 TERMS

FILE 'REGISTRY' ENTERED AT 15:02:09 ON 17 FEB 2006

94 SEA ABB=ON PLU=ON L16 L17

L18 STR

L19 9 SEA SUB=L17 SSS FUL L18

FILE 'HCAPLUS' ENTERED AT 15:02:46 ON 17 FEB 2006 9310 SEA ABB=ON PLU=ON L19(L)RACT+ALL/RL
3 SEA ABB=ON PLU=ON L20 AND L15
4 SEA ABB=ON PLU=ON L6
4 SEA ABB=ON PLU=ON L21 OR L22 L20

L21

L22

L23

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 FEB 2006 HIGHEST RN 874326-73-5 DICTIONARY FILE UPDATES: 15 FEB 2006 HIGHEST RN 874326-73-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

* The CA roles and document type information have been removed from * the IDE default display format and the ED field has been added, * effective March 20, 2005. A new display format, IDERL, is now * available and contains the CA role and document type information. * *

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE CASREACT

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1840 - 12 Feb 2006 VOL 144 ISS 7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

Some CASREACT records are derived from the ZIC/VINITI database (1974-1991) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE HCAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 17 Feb 2006 VOL 144 ISS 9 FILE LAST UPDATED: 16 Feb 2006 (20060216/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> fil hcap FILE 'HCAPLUS' ENTERED AT 15:03:29 ON 17 FEB 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 17 Feb 2006 VOL 144 ISS 9 FILE LAST UPDATED: 16 Feb 2006 (20060216/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

NODE ATTRIBUTES:
NSPEC IS RC AT 11
NSPEC IS RC AT 18
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 18 STEREO ATTRIBUTES: NONE

7 SEA FILE=REGISTRY SSS FUL L4 L6

L10 STR

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 10 CONNECT IS E1 RC AT 17 DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

184 SEA FILE=REGISTRY SSS FUL L10 L11 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L6(L) PREP+ALL/RL L13 38 SEA FILE=HCAPLUS ABB=ON PLU=ON
3 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 L11(L)RACT+ALL/RL L13 AND L14 L15 TRANSFER PLU=ON L15 1- RN: 94 TERMS L16 94 SEA FILE=REGISTRY ABB=ON PLU=ON L16 L17

L18 STR

Si×G1

VAR G1=X/O/N NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

9 SEA FILE=REGISTRY SUB=L17 SSS FUL L18 L19 9310 SEA FILE=HCAPLUS ABB=ON PLU=ON L19(L)RACT+ALL/RL L20 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND L15 L21

L22 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L6

4 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 OR L22 L23

=> d 123 ibib abs hitstr 1-4

L23 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2005:450973 HCAPLUS

02/17/2006

DOCUMENT NUMBER:

142:481876

TITLE:

Process for preparation of $7-[\alpha-amino(4-$

hydroxyphenyl)acetamido]-3-substituted-3-cephem-4-

carboxylic acid

INVENTOR(S):

Tyagi, Om Dutt; Rane, Dnyandev Ragho; Srivastava,

Tushar Kumar; Sirsath, Krishnarao Tukaram

Lupin Ltd., India PATENT ASSIGNEE(S):

SOURCE:

U.S. Pat. Appl. Publ., 12 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION: PATENT NO.

KIND DATE APPLICATION NO.

7 pionos

Α

US 2005113570 PRIORITY APPLN. INFO.: A1 20050526

US 2004-801443 IN 2003-MU1031

II

20040315 20030310

OTHER SOURCE(S):

CASREACT 142:481876; MARPAT 142:481876

GT

$$\begin{array}{c|c} \text{Me} & \text{O} \\ & \text{II} \\ & \text{OR2} \\ & \text{O} \\ & \text{O} \\ & \text{O} \\ \end{array}$$

AB A process is described for the preparation of 7-[D- α -amino- α -(4hydroxyphenyl)acetamido]-3-(1-propen-1-yl)-3-cephem-4-carboxylic acid (Cefprozil) in high yield and high purity, substantially free of impurities, which comprises preparation of mixed acid anhydride I (R1 = alkyl, aryl; R2 = Me, Et) by selecting the sequence and temperature of addition of the reagents and its subsequent condensation with a protected 7-APCA, followed by hydrolysis, isolation and purification to give Cefprozil in the form of a monohydrate. Thus, I (R1 = Et, R2 Me) was prepared from Et chloroformate with N-methylmorpholine and the potassium phenylacetate derivative, then condensed with II (preparation given), followed by HCl hydrolysis to give Cefprozil monohydrate. IΤ

120709-09-3, 7 APCA

RL: RCT (Reactant); RACT (Reactant or reagent)

Ι

(preparation of Cefprozil via condensation of mixed anhydride with disilylated 7-APCA followed by hydrolysis)

RN 120709-09-3 HCAPLUS

5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, CN

7-amino-8-oxo-3-(1-propenyl)-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

IT 851983-02-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of Cefprozil via condensation of mixed anhydride with disilylated 7-APCA followed by hydrolysis)

RN 851983-02-3 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 8-oxo-3-(1-propenyl)-7-[(trimethylsilyl)amino]-, trimethylsilyl ester, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

$$\begin{array}{c} \text{Me}_3\text{Si} \\ \text{O} \\ \text{R} \\ \text{R} \\ \text{H} \end{array}$$

L23 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:372931 HCAPLUS

DOCUMENT NUMBER:

140:391158

TITLE:

Process for preparing 3-propenyl cephalosporin DMF solvate from 4-methoxybenzyl 7-phenylacetamido-3-

chloromethyl-3-cephem-4-carboxylate

INVENTOR(S):

Deshpande, Pandurang Balwant; Khadangale, Bhausaheb Pandharinath; Gurusamy, Kumar; Konda, Ramesh Athmaram Orchid Chemicals & Pharmaceuticals Limited, India

PATENT ASSIGNEE(S):

U.S. Pat. Appl. Publ., 10 pp.

SOURCE:

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIN	KIND DATE			APPLICATION NO.						DATE				
					_			•						-				
	US	2004	0877	86		A1		2004	0506	1	US 2	002-	3150	10		2	00212	210
	US	6903	211			В2		2005	0607									
WO 2004039812			A1		2004	0513	1	WO 2	002-	IB54.	59		2	0021	218			
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM.	HR	нп	ΤD	TT.	TN.	TS	JP.	KE.	KG.	KP.	KR.	K2.	LC.	T.K.	LR.

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20050817 EP 2002-788375 20021218 EP 1562957 A1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK IN 2002-MA800 PRIORITY APPLN. INFO.: 20021030 Α WO 2002-IB5459 W 20021218 CASREACT 140:391158; MARPAT 140:391158 OTHER SOURCE(S):

GΙ

The present invention relates to an improved process for the preparation of 3-propenyl cephalosporin (I) DMF solvate (II), more particularly, the present invention relates to an improved process for the preparation of cefprozil DMF solvate, which is useful for the preparation of cefprozil. Thus 7-APCA (III) prepared from 4-methoxybenzyl 7-phenylacetamido-3-chloromethyl-3-cephem-4-carboxylate via a multistep synthetic sequence, was silylated with Me3SiCl and (Me3Si)2NHin CH2Cl2 and reacted with (-)-D-(p-hydroxyphenyl)glycine Dane salt IV (R2 = alkyl, Ph, CH2Ph, cycloalkyl; R3 = Me, Et, CHMe2), in the presence of a halogenated solvent and solvation with DMF, afforded II. II was desolvated with water to provide cis-cefprozil I.

IT 106447-44-3P

RL: BPN (Biosynthetic preparation); IMF (Industrial manufacture); RCT (Reactant); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 3-propenyl cephalosporin DMF solvate from 4-methoxybenzyl 7-phenylacetamido-3-chloromethyl-3-cephem-4-carboxylate)

RN 106447-44-3 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-amino-8-oxo-3-(1Z)-1-propenyl-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

IT 685836-16-2P

RL: BPN (Biosynthetic preparation); IMF (Industrial

manufacture); RCT (Reactant); SPN (Synthetic

preparation); BIOL (Biological study); PREP (Preparation);

RACT (Reactant or reagent)

(preparation of 3-propenyl cephalosporin DMF solvate from 4-methoxybenzyl 7-phenylacetamido-3-chloromethyl-3-cephem-4-carboxylate)

RN 685836-16-2 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,

8-oxo-3-(1Z)-1-propenyl-7-[(trimethylsilyl)amino]-, trimethylsilyl ester,

(6R, 7R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

IT 75-77-4, Trimethylsilyl chloride, reactions 999-97-3,

Hexamethyldisilazane

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of 3-propenyl cephalosporin DMF solvate from 4-methoxybenzyl

7-phenylacetamido-3-chloromethyl-3-cephem-4-carboxylate)

RN 75-77-4 HCAPLUS

CN Silane, chlorotrimethyl- (8CI, 9CI) (CA INDEX NAME)

RN 999-97-3 HCAPLUS

CN Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)- (9CI) (CA INDEX NAME)

Me3Si-NH-SiMe3

L23 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:819381 HCAPLUS

DOCUMENT NUMBER:

132:64106

TITLE:

Preparation and formulation of propenyl cephalosporin derivatives for pharmaceutical use as antibiotics for the treatment and prophylaxis of infectious diseases

INVENTOR(S):

Angehrn, Peter; Goetschi, Erwin; Heinze-Krauss, Ingrid; Richter, Hans G. F.

PATENT ASSIGNEE(S):

F. Hoffmann-La Roche A.-G., Switz.

SOURCE:

PCT Int. Appl., 103 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.			KINI)	DATE		APPLICATION NO.						DATE				
WO	WO 9967255			A1		1999	L9991229 WO 1999-E					EP4034 19990611					
	W:	ΑE,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
		DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GF	I, GM,	HR,	HU,	ID,	IL,	IN,	IS,
		JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LF	R, LS,	LT,	LU,	LV,	MD,	MG,	MK,
		MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU	J, SD,	SE,	SG,	SI,	SK,	SL,	ТJ,
		TM,	TR,	TT,	UA,	UG,	UZ,	VN,	YU,	ZP	A, ZW,	ΑM,	ΑZ,	BY,	KG,	ΚZ,	MD,
		RU,	ТJ,	TM													
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	UG	S, ZW,	ΑT,	ΒE,	CH,	CY,	DE,	DK,
		ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC	C, NL,	PT,	SE,	BF,	ВJ,	CF,	CG,
		CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN	1, TD,	ΤG					
CA	2335	288			AA		1999	1229		CA	1999-	2335	288		1	.9990	611
										AU	1999-	4608	1		1	.9990	611
AU	7614	50			B2		2003	0605									
BR	9911	445			Α		2001	0320		BR	1999-	1144	5		1	.9990	611
EΡ	1090	013			A1		2001	0411		EΡ	1999-	9291	82		1	.9990	611
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	₹, IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO										
TR	2000	0380	7		Т2		2001				2000-				_	.9990	611
	2002						2002				2000-					.9990	
	6583				В1		2003				1999-					.9990	
	2000										2000-					20001	
МО	2000	0065	07		A		2000	1220			2000-					20001	
IORIT	Y APP	LN.	INFO	.:							1998-					.9980	
											1999-					.9990	
										WO	1999-	EP40	34	1	W 1	.9990	611
HER SO	אוופרב	191 .			MARI	тαс	132.	61106	۲								

OTHER SOURCE(S):

MARPAT 132:64106

GI

AB Propenyl cephalosporins I [R = alkyl, aryl, heteroaryl, arylalkyl, alkenyl, etc.; R1 = H, Ph, alkyl; R2 = group with a secondary-, tertiary or quaternary nitrogen atom bound directly to the propenyl group, such as pyridinium, pyrrolidine, trimethylammonium, etc.] were prepared and formulated for pharmaceutical use as antibiotics for the treatment and prophylaxis of infectious diseases. Thus, propenyl cephalosporin II was prepared in a 3 step synthetic sequence starting from [6R-[3(E), 6 α , 7 β]]-3-(3-iodo-1-propenyl)-8-oxo-7-[(trimethylsilyl)amino]-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid trimethylsilyl ester, phenylthioacetic acid, and pyridine. The prepared propenyl cephalosporins were tested for antibacterial activity against methicillin-resistant strains of Staphylococcus aureus.

IT 148304-98-7

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and formulation of propenyl cephalosporin derivs. for
pharmaceutical use as antibiotics for the treatment and prophylaxis of
infectious diseases)

RN 148304-98-7 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[(1E)-3-iodo-1-propenyl]-8-oxo-7-[(trimethylsilyl)amino]-, trimethylsilyl ester, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

Me₃Si
$$\stackrel{H}{\underset{R}{\bigvee}}$$
 $\stackrel{H}{\underset{R}{\bigvee}}$ $\stackrel{E}{\underset{SiMe_3}{\bigvee}}$ CH₂I

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1993:427926 HCAPLUS

DOCUMENT NUMBER:

119:27926

TITLE:

Preparation and reaction of silylated

iodoallylcephalosporins

INVENTOR(S):

Ludescher, Johannes; Sturm, Hubert; Wieser, Josef

Biochemie Gesellschaft m.b.H., Austria PATENT ASSIGNEE(S):

SOURCE:

Eur. Pat. Appl., 12 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
EP 528343	A2	19930224	EP 1992-113715	19920812			
EP 528343	A3	19930310					
EP 528343	B1	20020918					
R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IE, IT, LI, LU	, NL, PT, SE			
AT 9101636	Α	19921015	AT 1991-1636	19910821			
AT 396108	В	19930625					
AT 224393	E	20021015	AT 1992-113715	19920812			
PT 528343	Т	20021231	PT 1992-113715	19920812			
ES 2183804	Т3	20030401	ES 1992-113715	19920812			
JP 05194533	A2	19930803	JP 1992-221330	19920820			
JP 2561780	B2	19961211					
US 5644052	Α	19970701	US 1995-437084	19950505			
US 5686604	A	19971111	US 1995-437083	19950505			
US 6169180	В1	20010102	US 1997-947215	19971008			
PRIORITY APPLN. INFO.:			AT 1991-1636	A 19910821			
			US 1992-932145	B1 19920819			
			US 1995-437083	A3 19950505			

OTHER SOURCE(S):

MARPAT 119:27926

GΙ

$$R^{1}HN$$
 $CH = CHCH_{2}X$
 $CO_{2}R^{2}$
 I

Title compds. (I; R = H, MeO; R1 = H, silyl protecting group; R2 = H, AB silyl protecting group, neg. charge; X = radical of a nucleophile), were prepared by treatment of I (R = H, MeO; R1 = R2 = silyl; X = iodo) with a nucleophile followed by optional desilylation. Thus, 7trimethylsilylamino-3-(3-iodo-1-propen-1-yl)-3-cephem-4-carboxylic acid trimethylsilyl ester (preparation given) was stirred at 0° with a prerefluxed mixture of N-methyl-N-ethylglycinamide, saccharin, and (Me3Si)2NH in MeCN to give 7-amino-3-[(E)-3-(carbamoylmethylethylammonium)-1-propen-1-yl]-3-cephem-4-carboxylic acid iodide.

ΙT 148305-34-4 148333-03-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(N-silylation of) RN 148305-34-4 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[3-(formyloxy)-1-propenyl]-8-oxo-7-[(trimethylsilyl)amino]-, trimethylsilyl ester, $[6R-[3(2),6\alpha,7\beta]]-(9CI)$ (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 148333-03-3 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, $3-[3-(acetyloxy)-1-propenyl]-8-oxo-7-[(trimethylsilyl)amino]-, trimethylsilyl ester, [6R-[3(Z),6<math>\alpha$,7 β]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

MegSi
$$\stackrel{H}{\underset{O}{\bigvee}}$$
 $\stackrel{R}{\underset{R}{\bigvee}}$ $\stackrel{R}{\underset{R}{\bigvee}}$ $\stackrel{Z}{\underset{O}{\bigvee}}$ OAc

IT 148304-99-8P 148305-00-4P 148305-35-5P

RL: RCT (Reactant); SPN (Synthetic preparation);
PREP (Preparation); RACT (Reactant or reagent)

(preparation and iodination of)

RN 148304-99-8 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[3-(acetyloxy)-1-propenyl]-8-oxo-7-[(trimethylsilyl)amino]-, trimethylsilyl ester, $[6R-[3(E),6\alpha,7\beta]]-(9CI)$ (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 148305-00-4 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, $3-[3-(formyloxy)-1-propenyl]-8-oxo-7-[(trimethylsilyl)amino]-, trimethylsilyl ester, [6R-[3(E),6<math>\alpha$,7 β]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 148305-35-5 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-amino-3-[3-(formyloxy)-1-propenyl]-8-oxo-, [6R-[3(Z),6α,7β]]-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

IT 148304-98-7P

RL: RCT (Reactant); SPN (Synthetic preparation);
PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with nucleophiles)
148304-98-7 HCAPLUS

RN 148304-98-7 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid,
3-[(1E)-3-iodo-1-propenyl]-8-oxo-7-[(trimethylsilyl)amino]-,
trimethylsilyl ester, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

IT 69959-14-4 148305-01-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(silylation of)

RN 69959-14-4 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 3-[(1E)-3-(acetyloxy)-1-propenyl]-7-amino-8-oxo-, (6R,7R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 148305-01-5 HCAPLUS

CN 5-Thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, 7-amino-3-[3-(formyloxy)-1-propenyl]-8-oxo-, [6R-[3(E),6 α ,7 β]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.